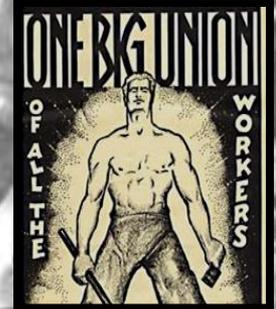


DR. HARTNELL



America 2.0



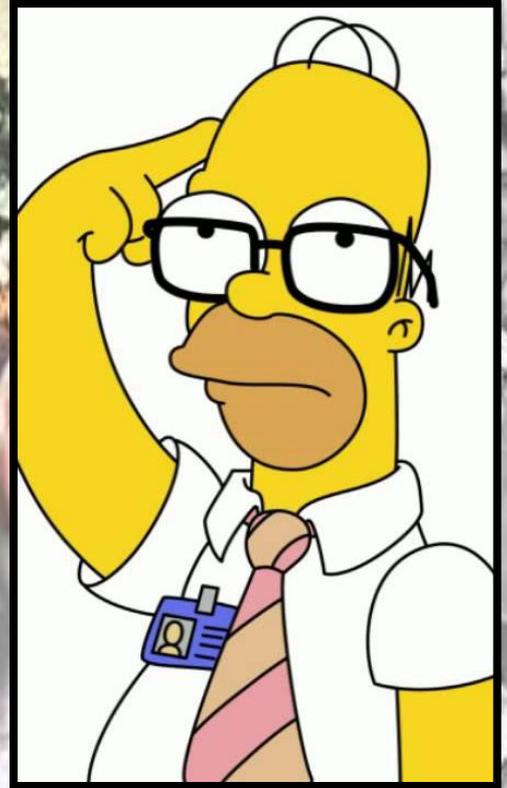


TODAY'S UNIT & LESSON



Lesson 16

(AH 2.16)





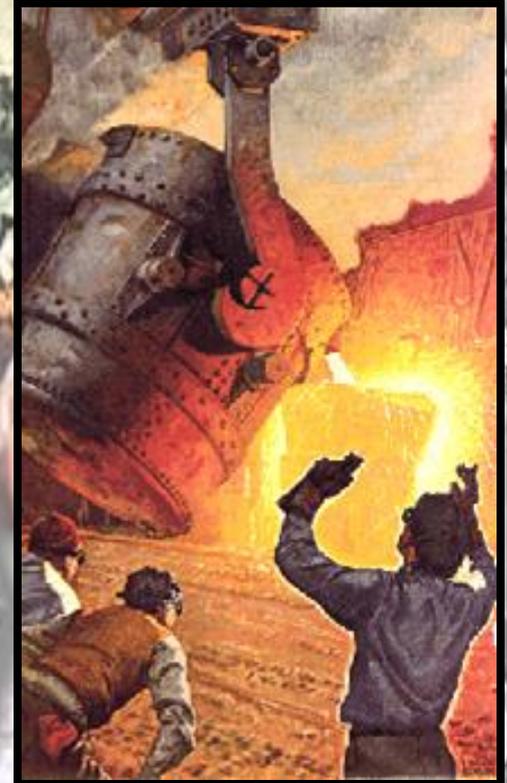
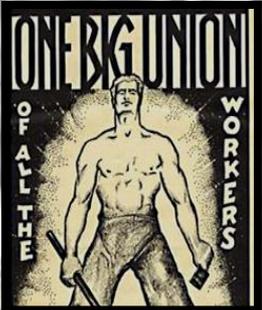
INDUSTRIAL REVOLUTION:

1st IR began in Britain in 1760 with the invention of steam power and powered machinery.

Steam power = coal.

Powered machinery = textiles.

Its effects eventually spread to the rest of the world.



**Dr. Hartnell's
135 LIVE!**



INDUSTRIAL REVOLUTION:

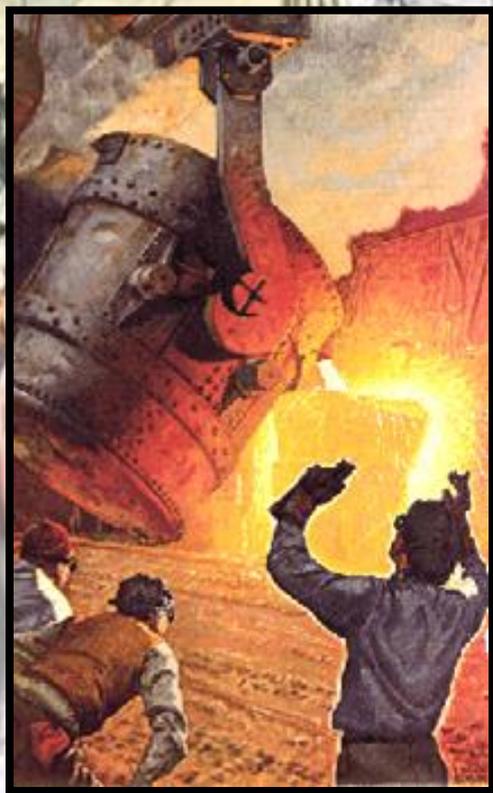
It **led to the growth of cities** as people moved from rural to urban areas in search of work.



It **changed the skill levels required** to work in factories.

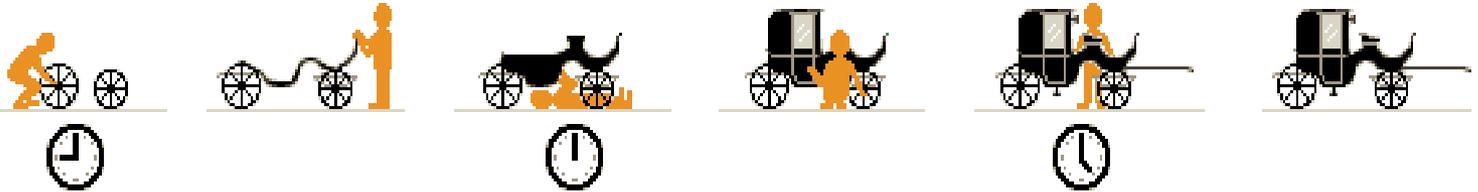


Again, this **social change** was **like nothing** since Neolithic Revolution.

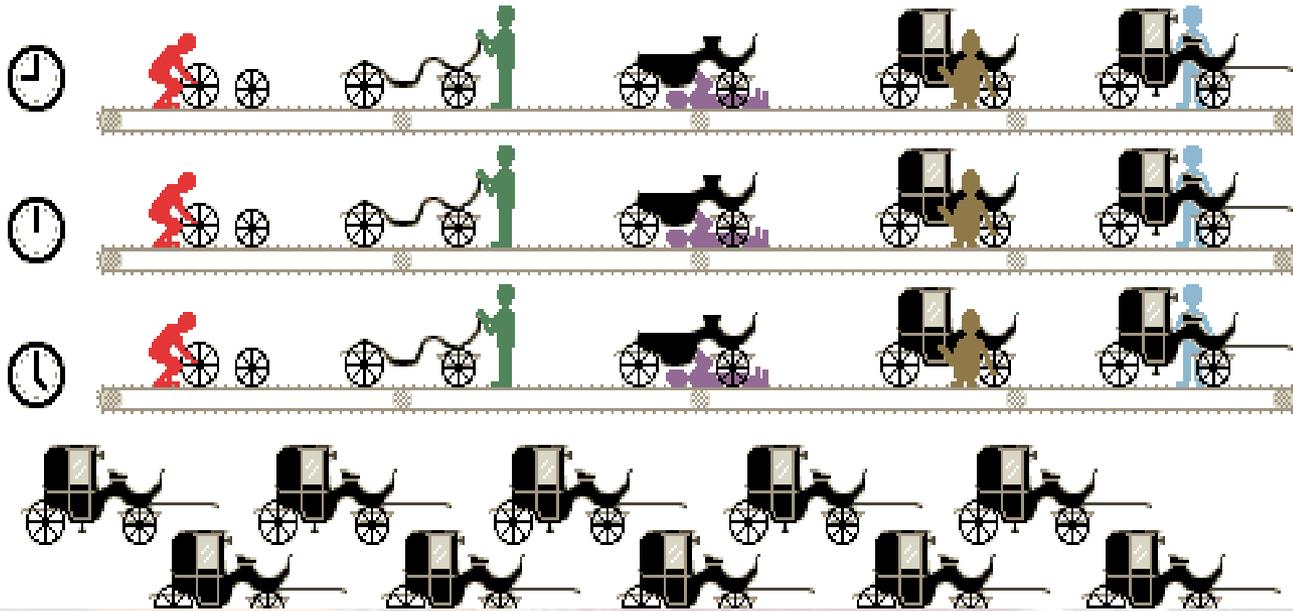




One person doing all five required steps in manufacturing a product can make one unit.



Five people, each specializing in one of the five steps, can make ten units in the same time.

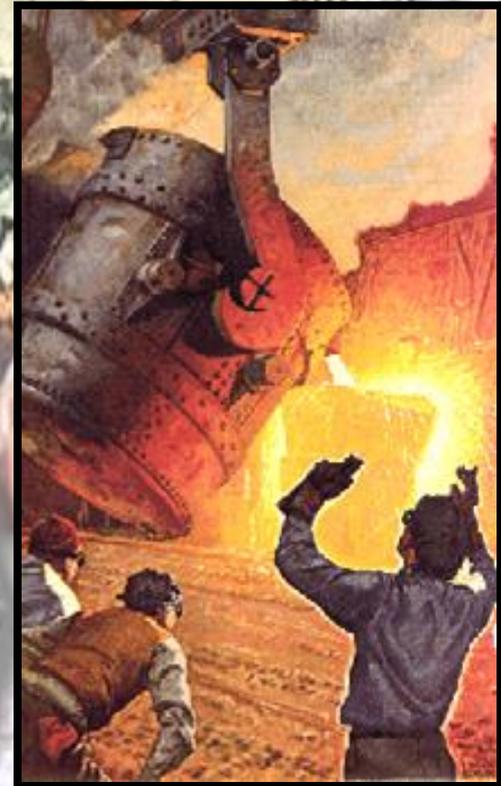




INDUSTRIAL REVOLUTION:

The **successes of the British** soon **led other nations to try to follow the same path.**

In the young U.S., **Secretary of the Treasury Alexander Hamilton** called for an **American Industrial Revolution** in his *Report on Manufactures* (**1791**).

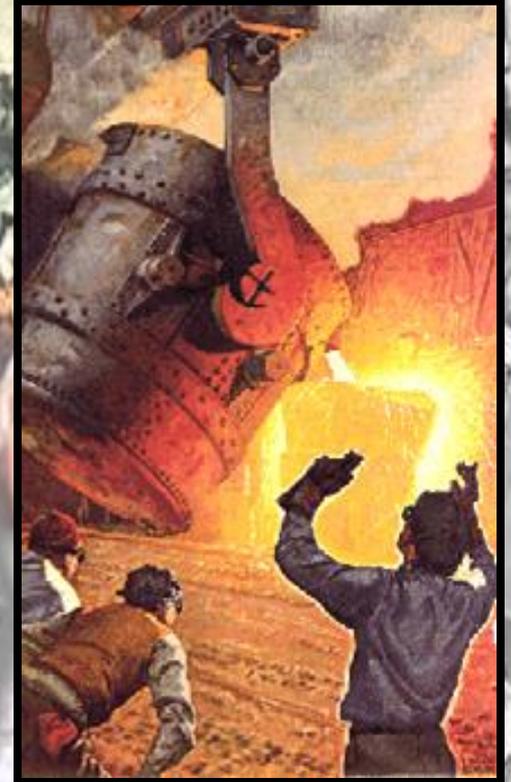
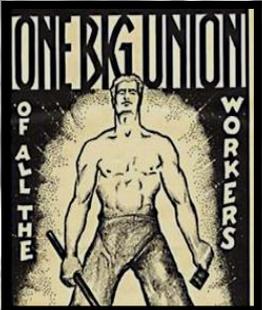




INDUSTRIAL REVOLUTION:

Many **Americans** felt that the **U.S.** had to become **economically strong** in order to **maintain its recently won independence from Britain.**

The Industrial Revolution unfolded in the U.S. even more **vigorously** than it had in **Britain.**





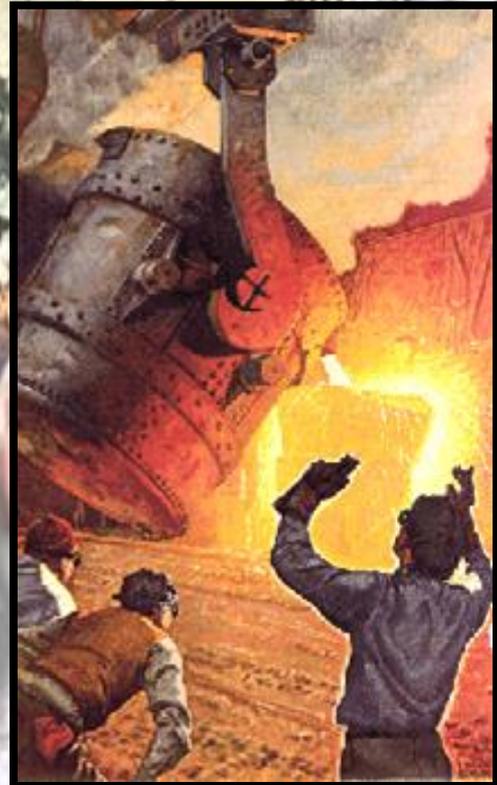
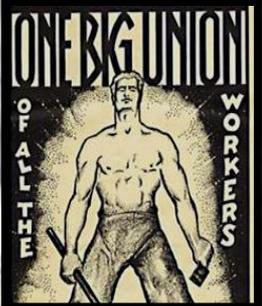
INDUSTRIAL REVOLUTION:

In 1790, 75% of the U.S. labor force worked in agriculture.

IR started in the U.S. in 1793 with Eli Whitney's cotton gin.

U.S. had advantages that made it fertile ground for IR.

There were 5 reasons why the IR succeeded in the U.S.:



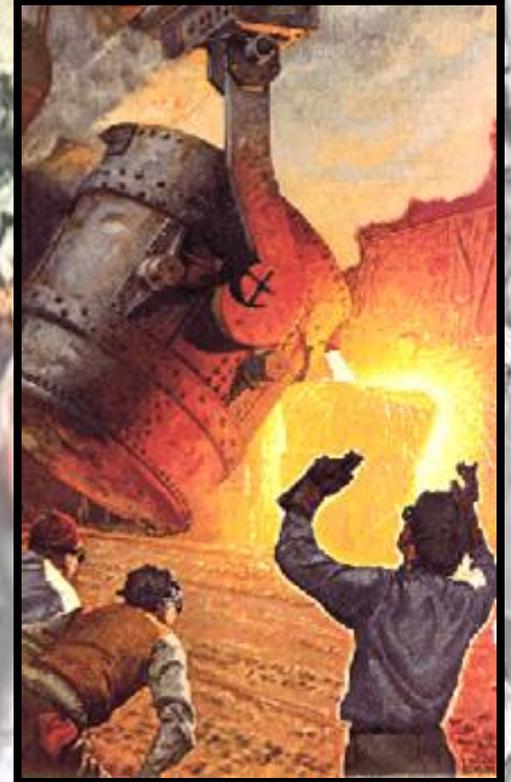
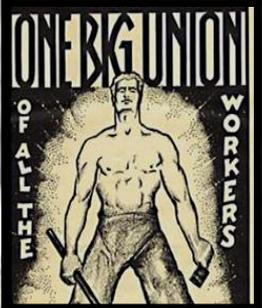


INDUSTRIAL REVOLUTION:

1. Thanks to Manifest Destiny, the **U.S. had tons of land.**

2. Compared to many countries, the **U.S. was stable both legally and politically.**

3. Compared to many countries, a good chunk of the **U.S. population was literate.**



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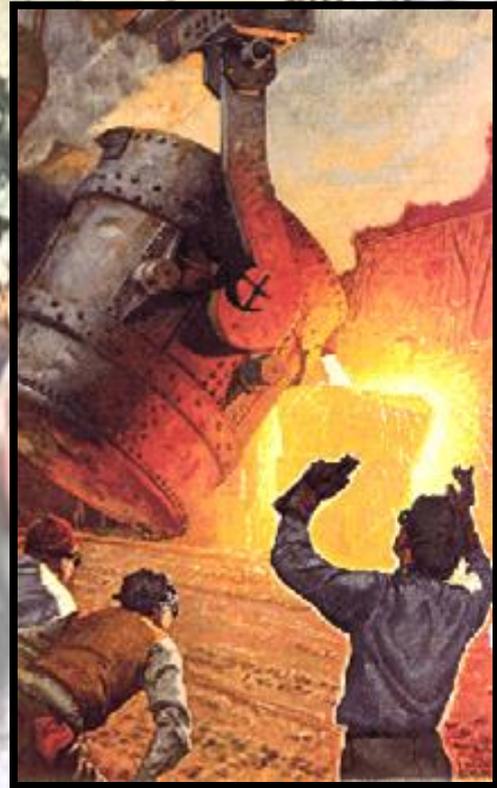


INDUSTRIAL REVOLUTION:

4. U.S. had the same language/culture as Britain.

As descriptions of machines appeared in print, Americans read about them, copied them.

5. The U.S. had the money to lure skilled mechanics from Britain.





INDUSTRIAL REVOLUTION:

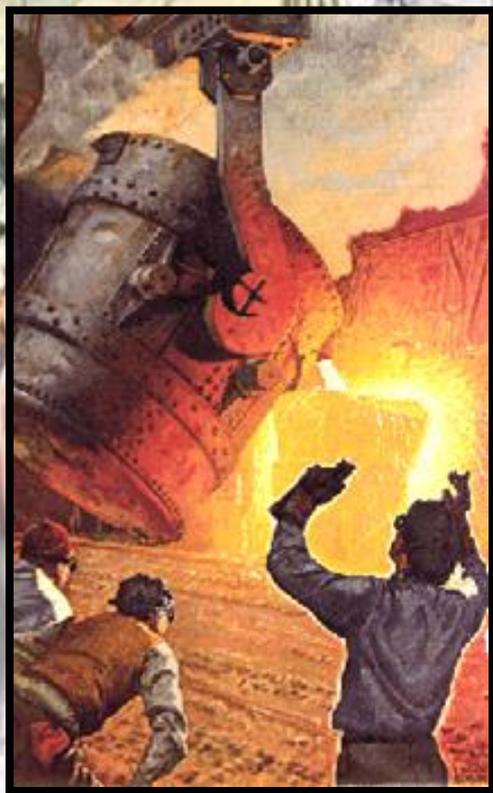
Samuel Slater was an important figure in leading British textile firm who **was lured away**.



He **created first U.S. textile mill in Rhode Island**.



When Britain started building railroads, the U.S. did too.

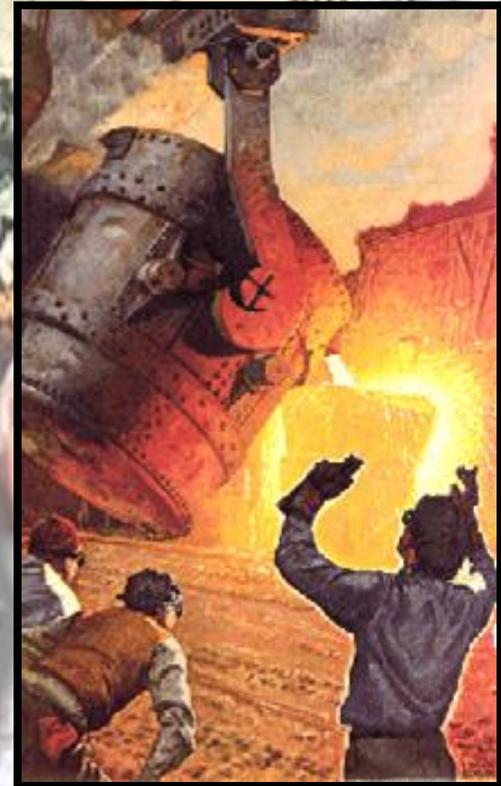
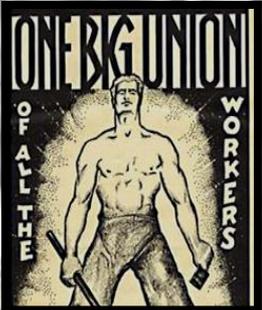




INDUSTRIAL REVOLUTION:

The most critical 19th Century communication improvement was telegraph, invented by American Samuel Morse.

Railroad and telegraph soon crisscrossed North America; by 1860, half of the world's railroads were in the U.S.



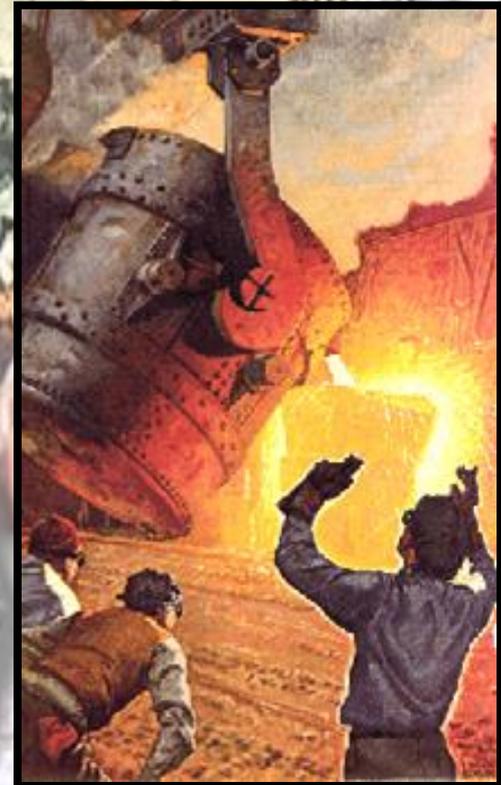
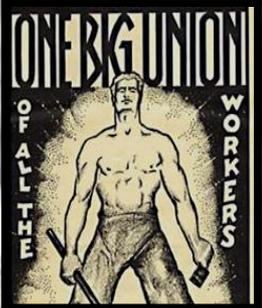


INDUSTRIAL REVOLUTION:

2nd IR began in the U.S. in 1871.

A second wave of technical and organizational advances carried this IR to new levels.

In particular, **iron and steel manufacturing transformed the U.S. into an industrial giant.**



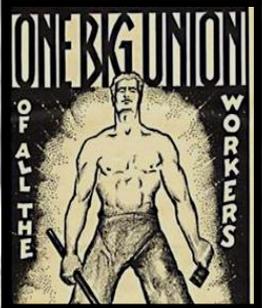


INDUSTRIAL REVOLUTION:

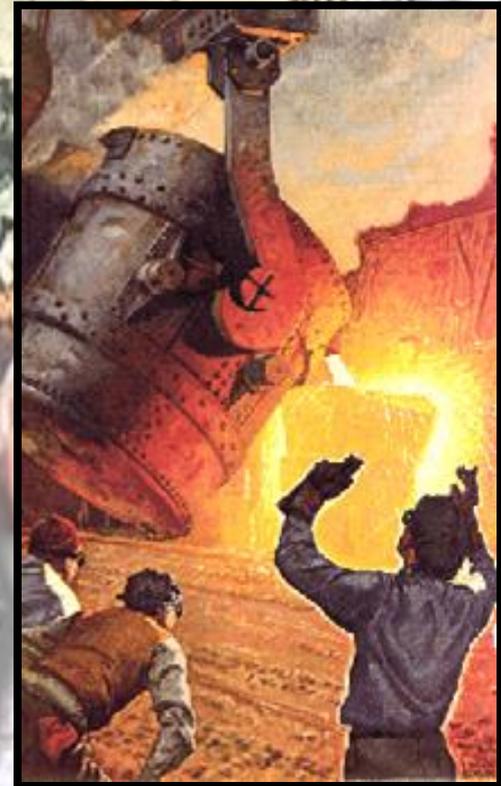
Scottish immigrant **Andrew Carnegie** built iron and steel empire using huge new plants.



John D. Rockefeller built his empire thanks to petroleum refining (**oil**).



In **1903**, **Henry Ford's** assembly line revolutionized factories.





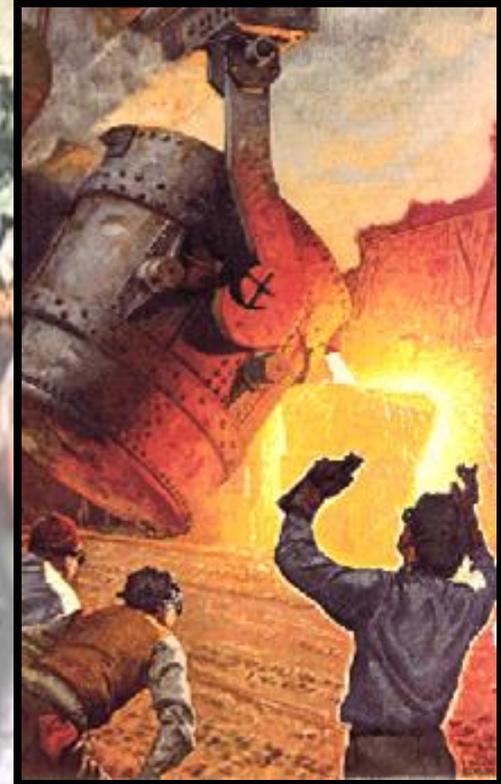
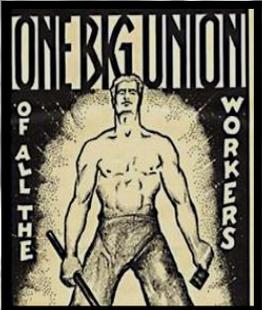
INDUSTRIAL REVOLUTION:

U.S. cities continued to grow.

1860: 9 U.S. cities with more than 100,000 inhabitants.

1900: 38 U.S. cities with more than 100,000 inhabitants.

1790: 5% of U.S. population lived in cities; **75% today.**



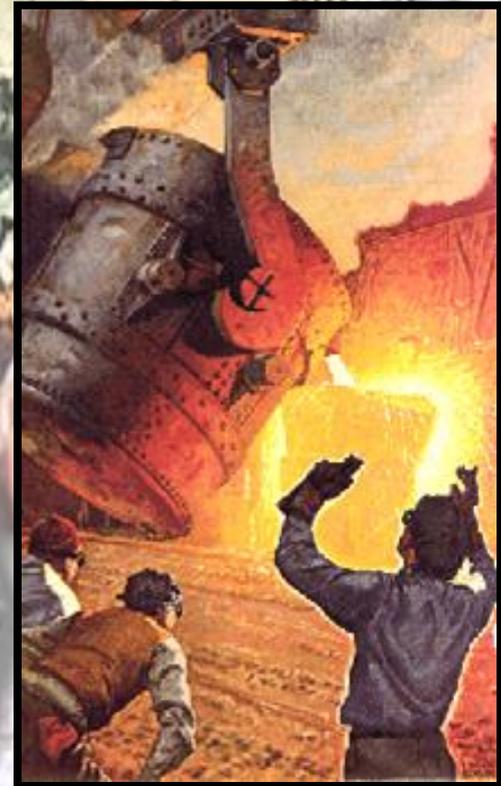
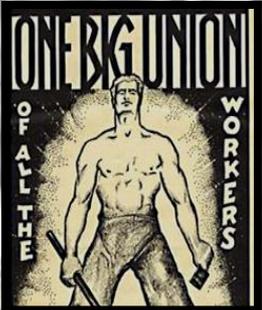


THE NEED FOR REFORM:

But the **IR** served as the **springboard for Big Business** looking to exploit the workers.

Big Business liked being free of government regulation and taxation.

Laissez-faire policies led to **abuses**, especially in the use of child labor.

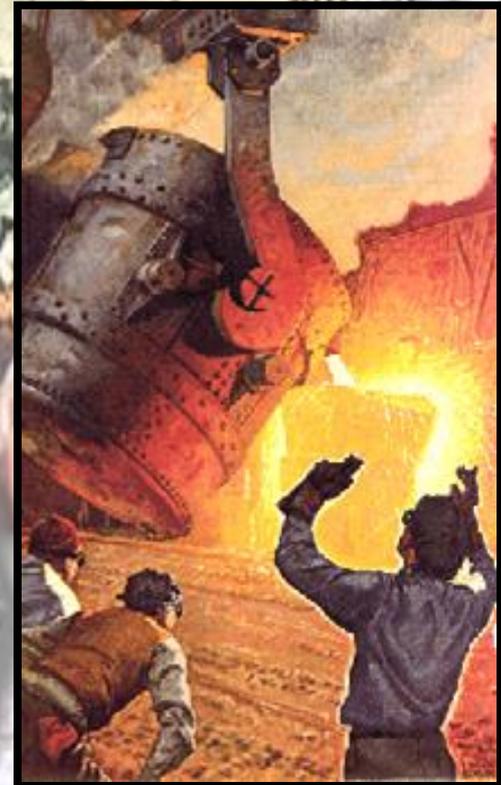




THE NEED FOR REFORM:

Gradually, **businesses** combined to control production and prices for the benefit of their owners... not the workers.

Thus, **competition** (an essential part of the laissez-faire system) was eliminated.





THE NEED FOR REFORM:

This trend toward monopolies, in turn, led to calls for reform.

What's a monopoly?

A situation where one owner controls the production, supply, and pricing of a product that has no substitutes.





\$\$\$ MONOPOLIES \$\$\$

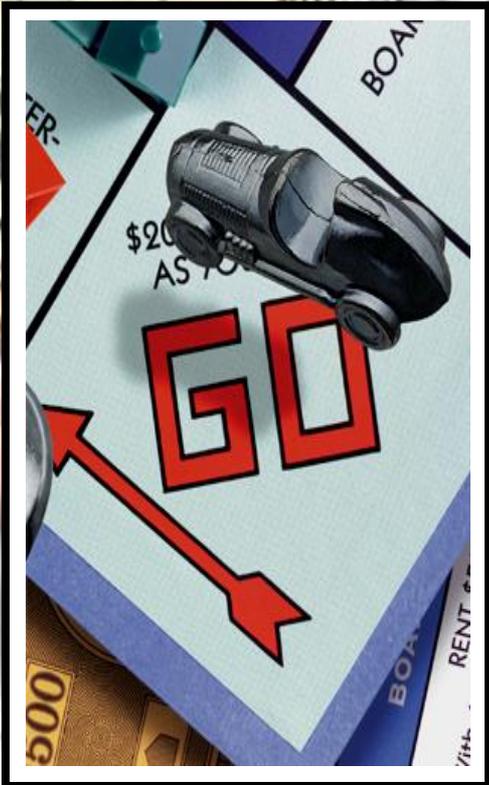
There are 2 ways to gain a monopoly:



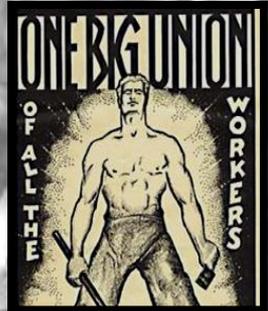
1. Vertical Integration



Vertical Integration is where you **buy out** all your **suppliers**.



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\$\$\$ MONOPOLIES \$\$\$

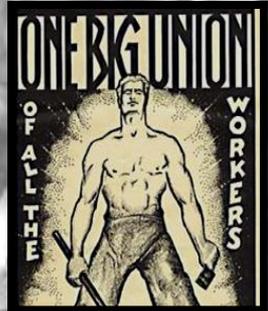
2. Horizontal Consolidation

Horizontal Consolidation is where you **buy out** all of your **competitors**.

Congrats! You are now an evil capitalistic tycoon!



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\$\$\$ MONOPOLIES \$\$\$

For example:

Dr. Hartnell opens up a lemonade stand in Westerville.

There are now 3 stands selling lemonade.

Dr. Hartnell sells his delicious lemonade for 55 cents a glass.



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\$\$\$ MONOPOLIES \$\$\$

Dr. Hartnell's competitors sell their lemonade for 25 cents a glass.

Dr. Hartnell builds up enough \$\$ to buy out all of the *Country Time* mix, trucks, factories, wooden spoons, glasses, wood for stands, pitchers, water, ice, sugar fields, etc.



Vertical Integration



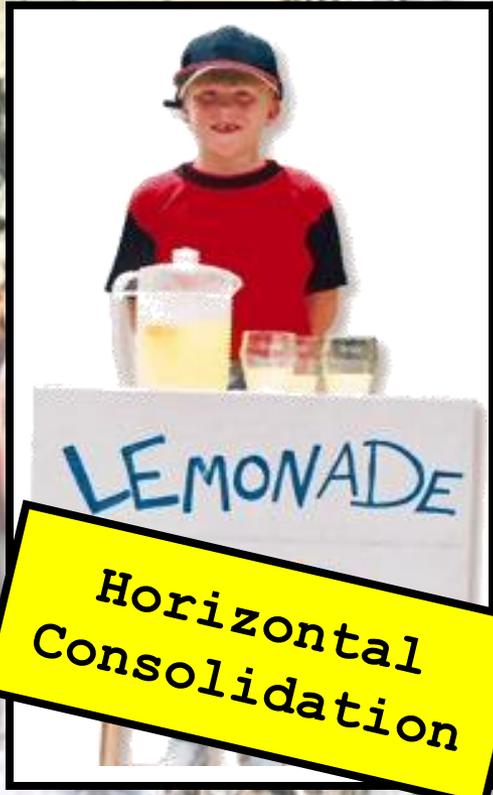
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\$\$\$ MONOPOLIES \$\$\$

Dr. Hartnell can now either buy out his other two competitors...

...or ruthlessly drive them out of business by charging high costs for supplies, which he now owns.



Horizontal Consolidation

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\$\$\$ MONOPOLIES \$\$\$

Still, Dr. Hartnell cannot charge \$20 a glass for my lemonade even though he has a monopoly.

Why not?

Lemonade is an elastic item.

This means it can be substituted.



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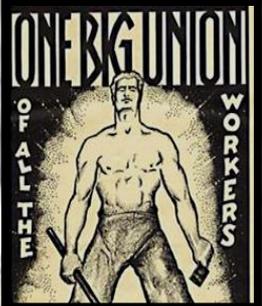
\$\$\$ MONOPOLIES \$\$\$

People do not need lemonade to drink when they are thirsty.

They can drink water or pop.

This is **called elasticity.**

If Dr. Hartnell's **prices become ridiculous**, people will simply find something else to drink.





\$\$\$ MONOPOLIES \$\$\$

However, if Dr. Hartnell had a monopoly in oil, he would have an **inelastic item**.



This means it **cannot (easily) be substituted**.





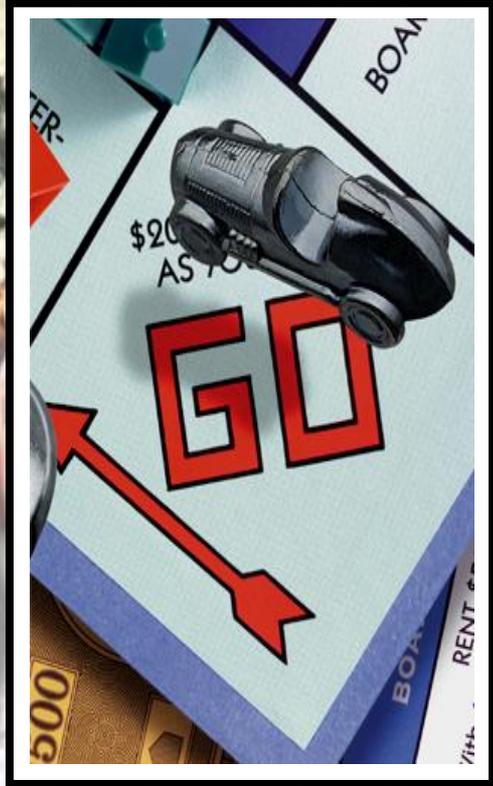
\$\$\$ MONOPOLIES \$\$\$

Famous Monopolies:

John D. Rockefeller and Standard Oil.

Andrew Carnegie and U.S. Steel.

Bill Gates and Microsoft.



Dr. Hartnell's 135 LIVE!



\$\$\$ MONOPOLIES \$\$\$

FYI about Bill Gates:



At his peak in **1998**, Gates made **\$1,000/second**.



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\$\$\$ MONOPOLIES \$\$\$

John Rockefeller and Andrew Carnegie believed in Social Darwinism and the Protestant Work Ethic.

Social Darwinists believe that humans, like animals, compete in a struggle where natural selection results in survival of the fittest.



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\$\$\$ MONOPOLIES \$\$\$

Darwinists justify imbalances of power between races, religions, and countries because they consider some people "more fit" to survive.

This theory was applied to industrialization: *"Survival of the fittest business."*



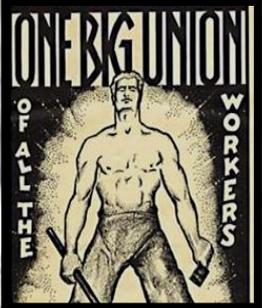


\$\$\$ MONOPOLIES \$\$\$

The **Protestant Work Ethic** stated that riches and wealth were a sign of God's favor.

Sort of like a personalized Manifest Destiny...

Thus, the **poor must be lazy and inferior** people – and not fit for survival.



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WHAT
DID WE
LEARN
TODAY?



135 LIVE!



FAST 5: UNIT 2, LESSON 16 (AH 2.16)

QUESTION 1 



1. What inventions drove the First Industrial Revolution?
What inventions drove the Second Industrial Revolution?

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FAST 5: UNIT 2, LESSON 16 (AH 2.16)

QUESTION 2 

2. What were the 5 reasons the Industrial Revolution succeeded in the U.S.?



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FAST 5: UNIT 2, LESSON 16 (AH 2.16)

QUESTION 3 



3. Name AND explain the 2 ways to gain a monopoly.



FAST 5: UNIT 2, LESSON 16 (AH 2.16)

QUESTION 4 

4. Using Dr. Hartnell's lemonade stand example, explain monopolies. What does elasticity mean when it comes to a product that a company is selling?





FAST 5: UNIT 2, LESSON 16 (AH 2.16)

QUESTION 5

5. What is Social Darwinism?
What is the Protestant Work Ethic?



- ! THINK
- ✓ CHECK
- > SUBMIT



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